THE MARTIN STAR

November 1943

Man Of Many Talents

G. K. HAMMER, Personnel Director

THE problem of maintaining sufficient manpower to keep the wheels turning in a plant the size of The Glenn L. Martin-Nebraska Company is no easy task even in normal times. Today, the job is even more difficult.

G. K. Hammer, Personnel Director for the Martin-Nebraska Company, is only too well aware of the problem that confronts him. So far as skilled labor is concerned "We have already scraped the bottom of the barrel, and from now on it's up to us to create skilled labor from among older men and from among the women of Nebraska."

There was a time, not so long ago, either, when conditions were just the reverse. The Nebraska plant was new, then, and our production program had not yet reached its full stride. Job applicants were numerous, and the Personnel Department could, to a certain extent, pick and choose from among the hundreds of job seekers. Hammer refers to that period as "the good old days," and ruefully wonders if that sort of condition will ever exist again.

Born November 8, 1901, in Oswego, New York, Hammer received his early education in the Oswego schools and later graduated from the Oswego State Normal School where he majored in Industrial Arts. In 1921, Hammer started a career as a school teacher in Johnstown, New York, and four years later met and married Mrs. Hammer.

In 1936, the Nebraska Company's Personnel Director abandoned school teaching as a career and entered the airplane business as a mechanic at $15 a week with the Luscomb Aircraft Company of West Trenton, New Jersey. Later he was transferred to Detail Parts and Final Assembly where he remained until January of 1937 when he was assigned the job of instructor in Aircraft Mechanics in Luscomb's School of Aeronautics and for two years he directed the school's activities. In 1939, he became Personnel Director for the firm.

On September 15, 1941, Hammer joined the Martin Company at Baltimore in the Personnel Department and worked closely with the department's director, Dan Siemon. Six weeks later he was assigned the important job of heading up personnel work for the new organization just getting under way in Omaha. In moving to Nebraska, Hammer brought with him two assistants, Bob Lowry, now assistant personnel director, and Bob Linsley, who, until he was called into the Army, served as office manager.

The trio set up offices in the Saunders-Kennedy Building and started the big job of hiring men to man the machines in the plant that was soon to swing into the production of Martin Marauders.

At Martin-Nebraska, personnel work covers a wide field of activities other than the important task of hiring men and women.

For instance, under Hammer's direction the important job of Industrial Relations is conducted. This group, headed up by W. S. Cargile, directs the activities of scores of employee counselors, the recreation department and the safety department, in-service interviewing, job transfers and the induction of new employees. Also reporting to Hammer are the chief of protection, medical director, transportation chief, selective service supervisor, merit rating group and the cafeteria director. These are just a few of the jobs that must be efficiently conducted in order to keep the wheels turning on the Martin-Nebraska production front.

The father of two children—Joan Marian and Barbara Anne—Hammer has one hobby that falls directly in line with the business of building bombers. When he was still with Luscomb, he was bitten by the model airplane bug. He took several courses in the art and later taught classes in model building. Today, when time permits, he gets out the glue, the fabric and the balsa and builds model planes.

THE MARTIN STAR

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Again The Month Of Thanks!

HOW much more we have to be thankful for than we had this time last year! Do you remember?

Then we looked back on eleven black months—months that had seen our outlands overrun by yellow hordes, our military and naval outposts beaten down before the weight of superior forces, our armies and navies and air forces terribly inadequate to face foes numerous and well equipped, our civilians herded into filthy prison camps.

The picture was grim, yet we gave thanks that we were free Americans — that we had bread to eat . . . that we had work to do . . . that we could express our opinions freely . . . that we could give thanks in any church of our choosing . . . that we had the God-given treasure of free initiative of the individual. Those thanks we gave on this very page a year ago.

When Thanksgiving Day comes this month, how fervently may we drop to our knees to give thanks for what has transpired since!

We have driven back the Japs, from the Aleutians and in the Southwest Pacific, and we have struck hard from the clouds at their bases. We have fought back the Germans and, with our British and French Allies, have chased them from Africa. With our Allies, we have beaten the Italians into surrender and seen them turn on their former Axis partners. We have unleashed terrible vengeance from the skies upon the citadels and industries of the German aggressors. In the East, our Russian Allies have rocked the Nazis back on their heels and have taken back all of the territory lost in the previous year.

Undisturbed by the bombs which have harassed the industries of Europe, we have poured forth a mounting stream of weapons. Millions of men have been called to the colors, and more are moving up.

It has been a year of glory for us. Free American soldiers have proven themselves unconquerable; free American airmen have taken the lead to spearhead the world-wide attack; free American sailors have played an heroic part in clearing the seas for our men and our war materials; free American industry has done the impossible.

We of Martin have reason to give thanks. We know that we have played our part. We know that our ships have defended nobly the freedom for which we fight. From Alaska and the Mid-Pacific, to the South Pacific, Africa and England and on the world's seas our efforts have borne fruit. Not in vain have we worked hard and steadily to turn out those bombers. Their deeds will be written forever in pages of history.

Individually, our thanks go up for the chance we have had to serve; for the safety we have enjoyed, and the misery that we so far have been spared — misery that other nations have known. Some of us have lost loved ones, but out the aching void may go our thanks that they paid proudly the price that ever must be paid for freedom and decency. May we prove worthy of them.

But thanks are not enough in this Month of Thanks. We must determine anew that what we have helped to gain will not be lost. Providence has been kind to us, but Providence is kind only to those who deserve it. We must see to it that, in the Month of Thanks of 1943, we may justify again the gratitude that we feel for a job well done, for a fight well fought, for a year well spent.

November 1943 ★ EDITORIAL STAFF ★ Vol. II No. 10

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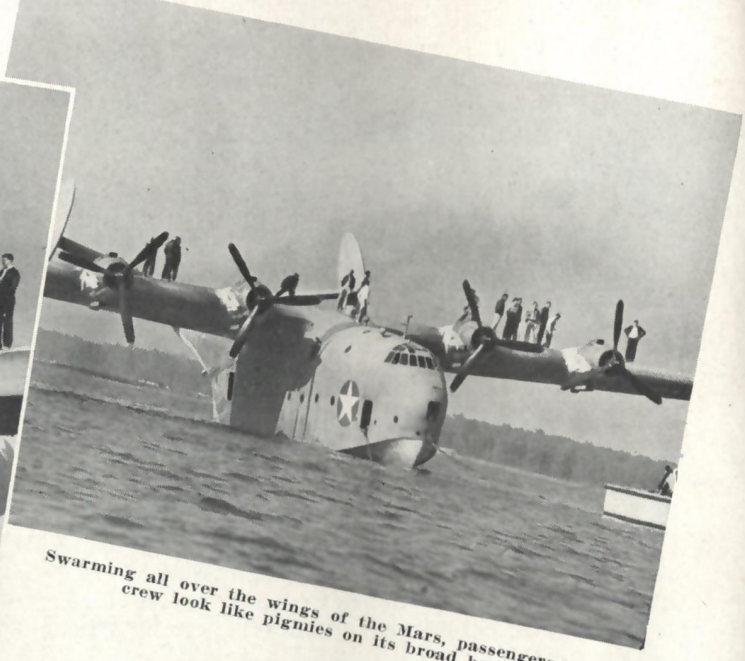
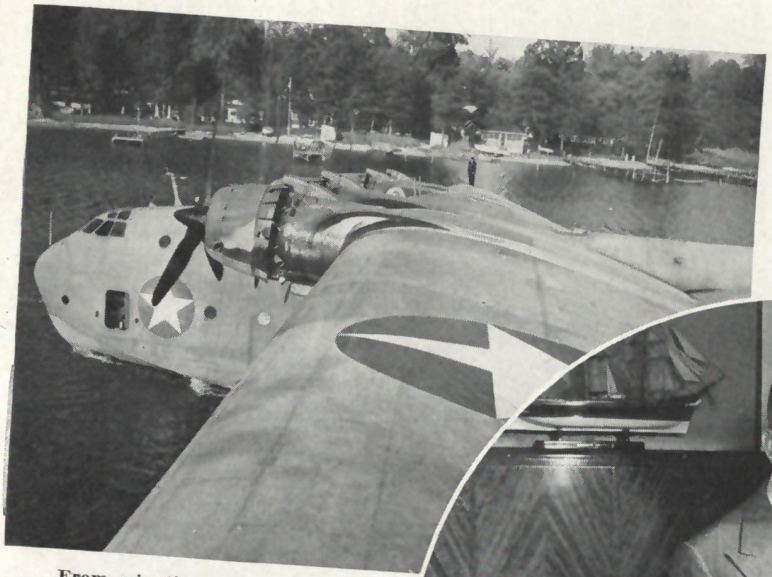
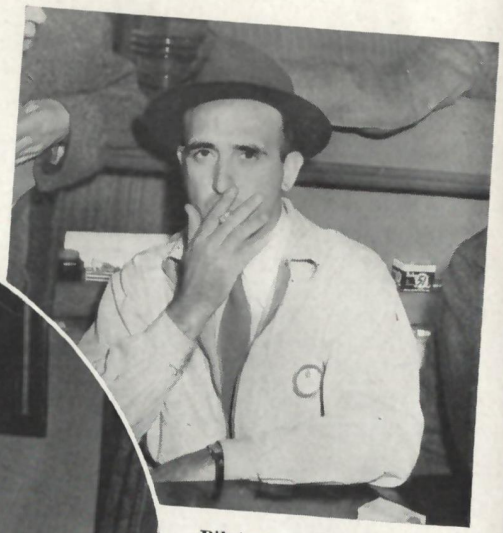
Even when assembled in a compact group, the Mars dwarfs those who fly in her.



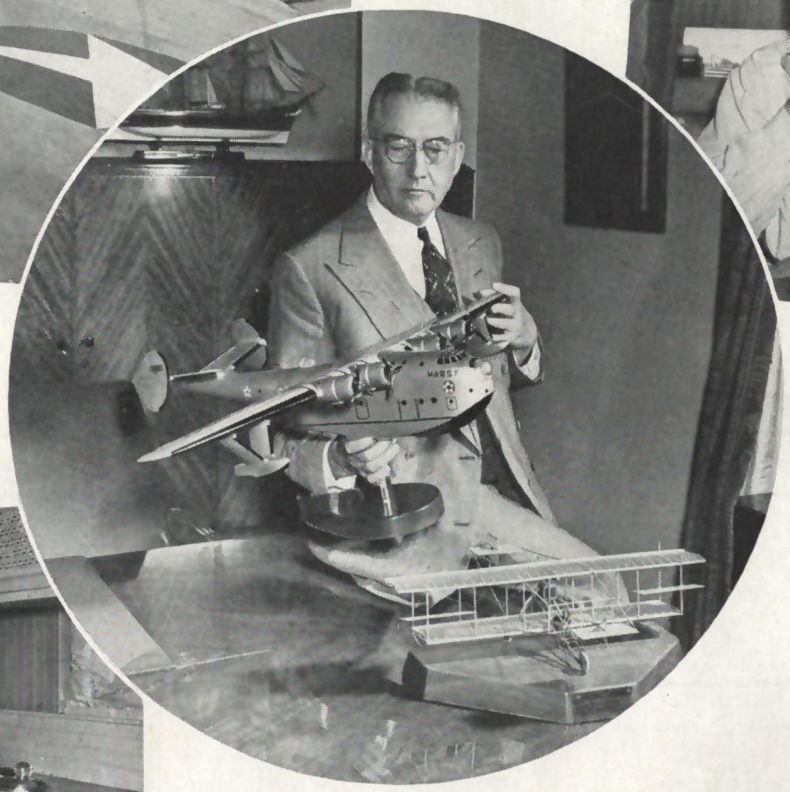
Swarming all over the wings of the Mars, passengers and crew look like pigmies on its broad back.



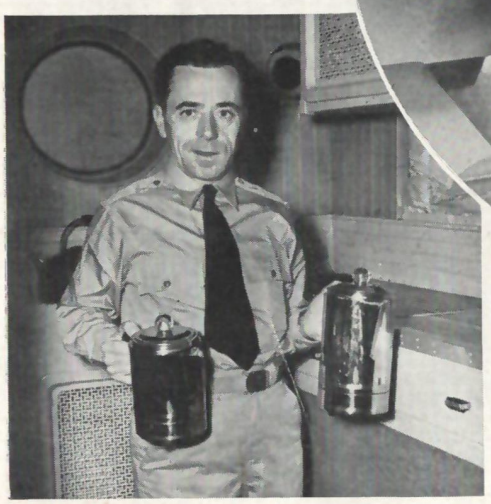
From wingtip to wingtip it's a long way. Yes, that's a human figure 'way off there in the distance.



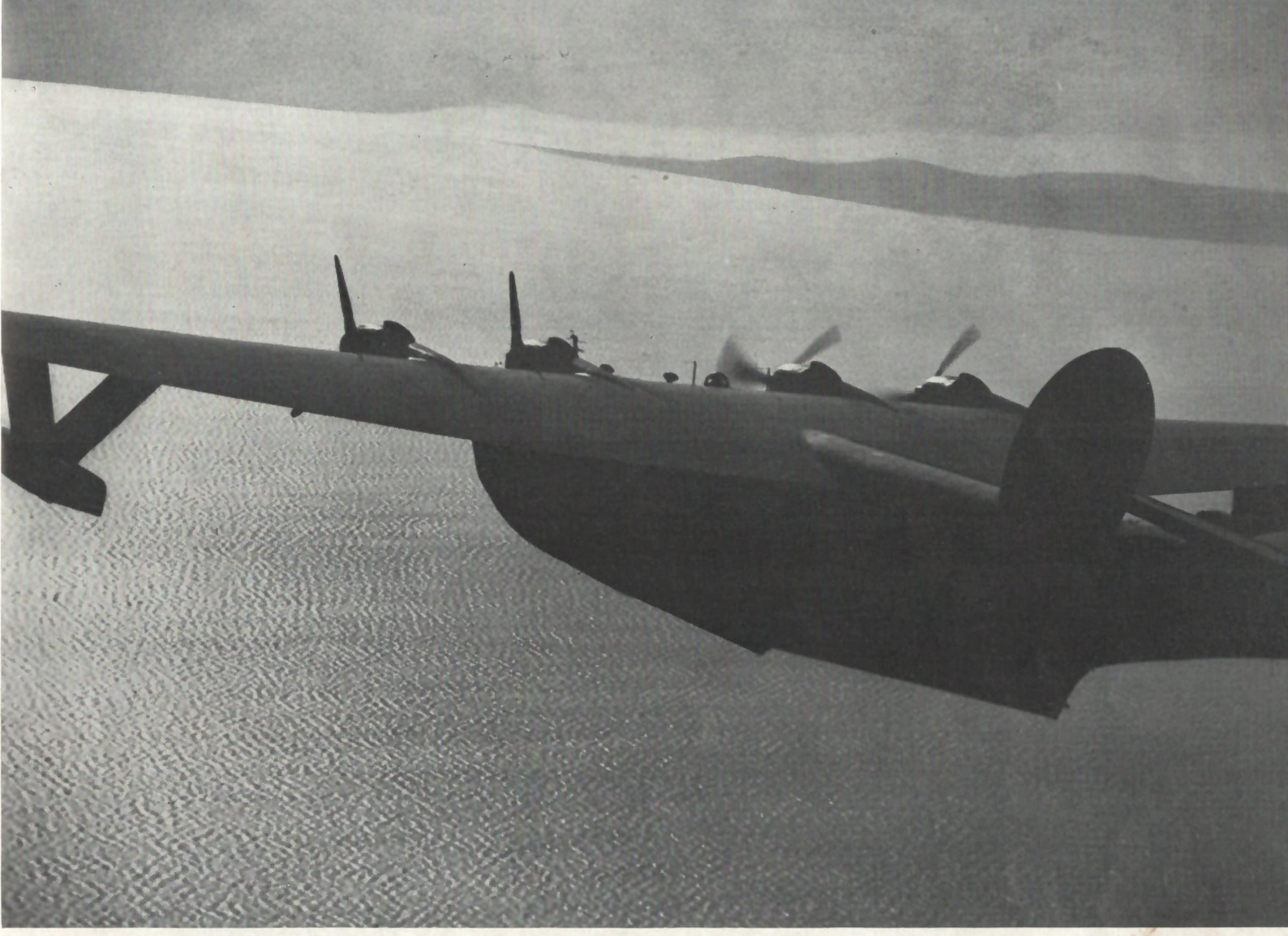
Pilot of the Mars during her trial flights, Capt. C. T. Robertson is caught in an informal pose.



A lifetime in aviation. Glenn L. Martin examines models of the two ships which tell the whole story of his life—the old boxkite model is on the table; in his hand Mr. Martin holds a model of the huge Mars.



William Scouler, chief steward of Pan-American, was aboard on the trials and pronounced the Mars galley the best he ever cooked in.



Two of her engines cut out, the Mars flies into the sunset on one of her recent test runs.

Mars Passes Flight Tests "Cum Laude"; Sets Many Records on Grueling Trips

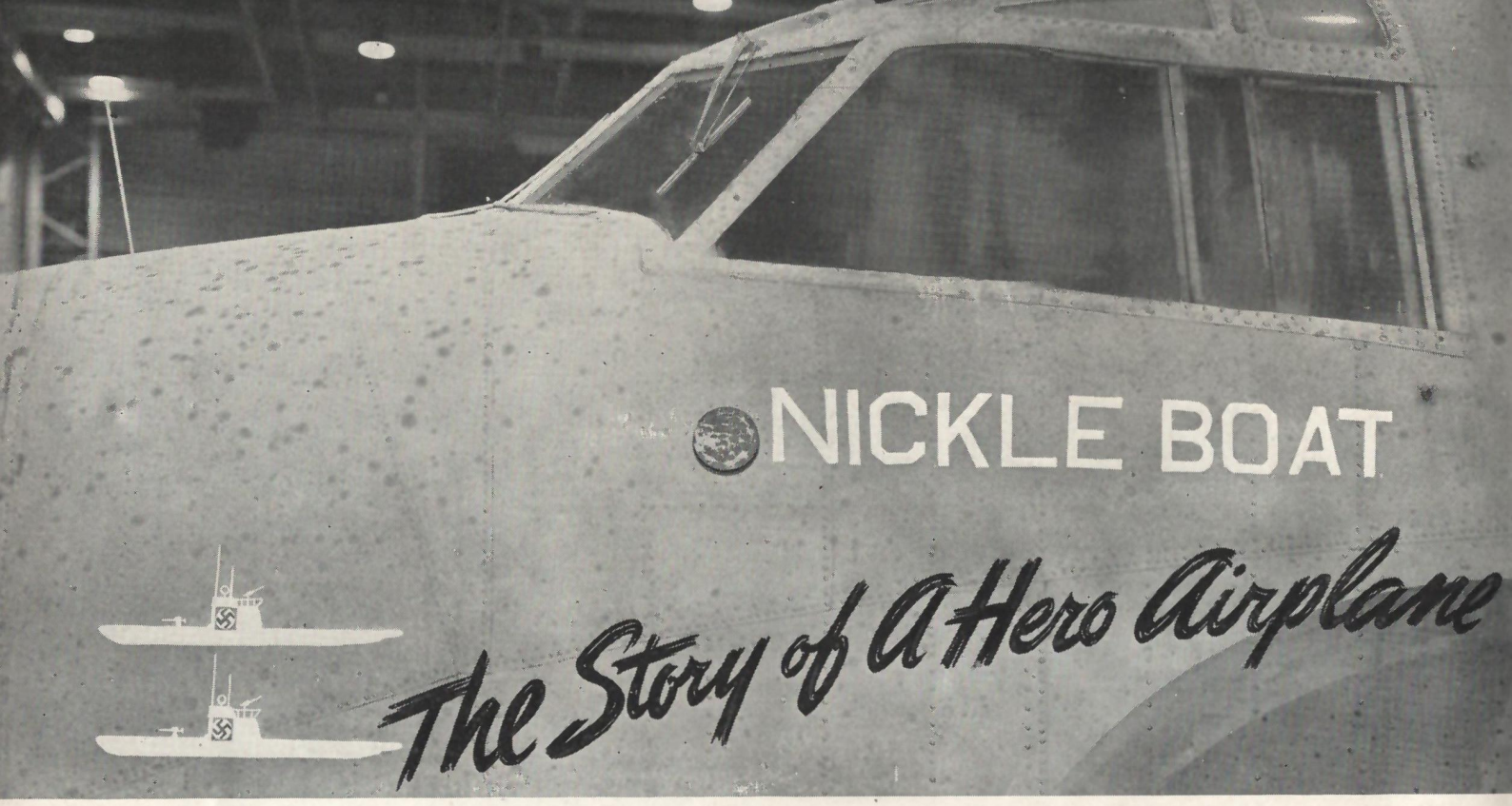
THE Martin Mars, world's largest flying boat, has just been turned over to the Navy Trial Board following completion of the final group in a grueling series of tests that have proved conclusively the efficiency, strength and practicality of this "flying Liberty ship." As soon as the Trial Board concludes its examination, the 70-ton behemoth will return briefly to Middle River for repainting and the installation of soundproofing and interior trim preparatory to entering active Naval service where she will speed men and munitions to distant war theaters.

On her last few flights the Mars underwent some of the severest tests to which an airplane has ever been subjected, and came through with flying colors. First came a 32 hours and 17 minute endurance flight. The giant flying boat took off on the morning of October 5 with 22 people and approximately a tank car load of gasoline aboard. When she returned to Chesapeake Bay the following afternoon, she had traveled in excess of 4,600 miles—equivalent to a non-stop trip from Baltimore to Berlin and back to London—around a course bounded by Baltimore, Norfolk, Cape Cod and New York, had bettered the international closed circuit distance record for seaplanes by approximately 50 per cent, and still had enough gas in her tanks for several more hours flying.

This demonstration of reliability and stamina was followed by an even more dramatic test in which the structural strength of this super-seaplane was graphically shown. With Captain C. T. Robertson, veteran civilian pilot, at the controls and representatives of the U. S. Navy, The Glenn L. Martin Company and Wright Aeronautical Corporation—supplier of her Cyclone 18 engines—aboard, the Mars surged up to an altitude in excess of 11,000 feet. Then she pointed her nose down in a power dive and didn't pull out until her accelerometer read over 3 g's! This imposed a weight of 210 tons, approximately that of a Coast Guard Cutter, on her giant wings, but they withstood even this tremendous strain—a strain they would never have to undergo in normal service — without complaint. This was almost equivalent to the half-million pound load imposed on the Mars wings and hull in unique static tests before she was first flown.

The final two Mars flights before her delivery to the Trial Board were devoted to two and three engine tests, in which the big flying boat showed that she could not only maintain altitude, but could actually climb with two of its four propellers fully feathered. In the two engine tests, the engines cut were both on the same side — the most diffiicult operating condition imaginable—but the ship remained in perfect control at all

(*Continued on page* 18)



The Story of a Hero Airplane

Two white subs proudly displayed on her weather-beaten nose, Nickle Boat "came home" for a brief visit. Fully reconditioned, the famous Mariner will soon be back with the Fleet.

ONE of the Navy's outstanding hero airplanes came winging back to the men who built her early last month. On her bow was painted the name—"Nickle Boat"—bestowed by West Coast crew members in memory of a well-loved San Francisco ferry; and under this name she wore two white submarines representing two Nazi raiders whose raiding days are over.

Soon "Nickle Boat"—fully reconditioned and modified according to the latest dictates of anti-U-boat strategy—will once again be heading back to the war zones for combat service. Fresh coats of paint will have covered the battle marks on her war-scarred hull, but she will still be wearing those two submarines on her nose, for to the Navy's airplanes those two subs represent what the Distinguished Flying Cross represents to the Navy's fliers. In the case of "Nickle Boat," moreover, those two subs stand for two of the outstanding U-boat sinkings yet announced.

In the first she teamed up with another Mariner to kill a U-boat whose destruction was widely pictured in the nation's press. The second, a solo endeavor, resulted in the capture of Germany's most famous U-boat commander—Kapitanleutenant Friedrich Guggenberger, who was decorated for torpedoing and sinking the H.M.S. Ark Royal.

Pressed Home Attack

Lieutenant (jg) Harold C. Carey, Norfolk, Va., since reported missing while attacking a submarine in another PBM, was at "Nickle Boat's" controls when she earned her right to the first of those two images. In company with another Mariner piloted by Lieutenant Howland S. Davis of Baltimore, he was out scouring the South Atlantic for a U-boat which had escaped attack the previous day by crash diving. Crew members of the two Mariners sighted their quarry, believed to have been the same sub seen the day before, and pressed home their attack.

Lieutenant Davis' plane dived for the German raider, and his co-pilot bombardier, Aviation Pilot, First Class, Eugene Louis Richoz of Pensacola, Fla., straddled the U-boat with depth bombs as it went into a crash dive. As Lieutenant Davis pulled his Mariner out of its dive and started to circle for another attack, his tail gunner, Seaman, Second Class, Everett Marks Hunt of Norfolk, Va., shouted that the sub was resurfacing. Lieutenant Davis quickly turned into position for a strafing run, but saw that "Nickle Boat" was already moving in for the "kill."

On the first attack Lieutenant (jg) Carey had followed Lieutenant Davis in, but believing the first Mariner's attack sufficient to cripple the raider and force it to the surface, wisely elected to withhold his own salvo. With Ensign Hubert Smolsnik of Cle Elum, Wash., a machinist's mate when he first joined "Nickle Boat," at the controls, and Lieutenant (jg) Carey manning the bomb releases, "Nickle Boat" went into a steep dive and dropped her bombs. The resulting explosion completely enveloped the U-boat.

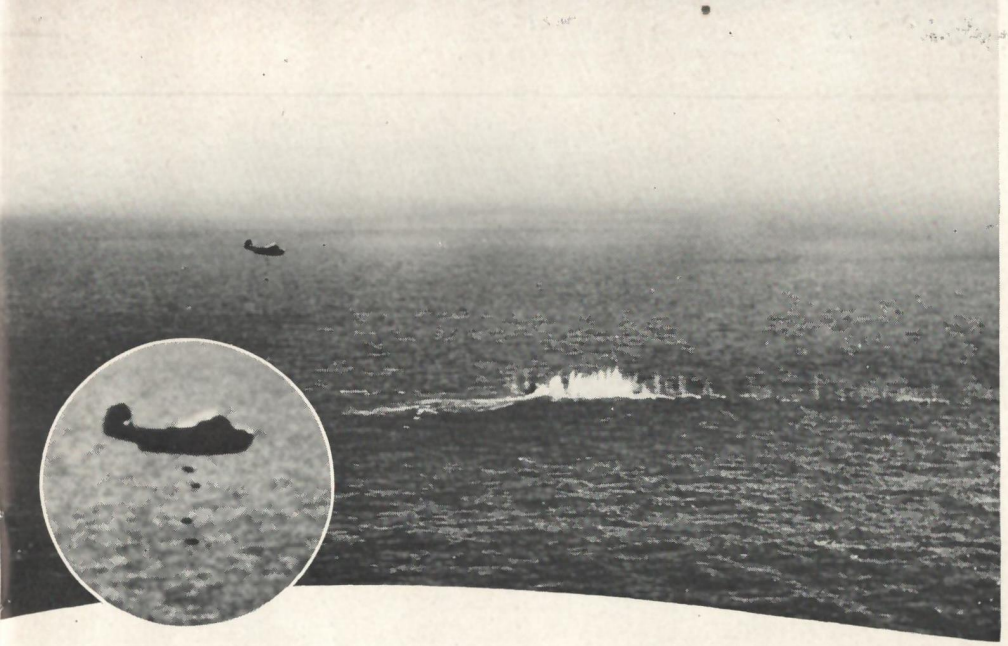
Then with the sub damaged and fully surfaced, the two Mariners executed a series of strafing runs. First one, then the other, would dive on the crippled raider, with bow and waist guns blazing and tail guns getting in a burst a split second after each plane passed the sub. The U-boat, smoking heavily, moved forward slowly. It was down by the stern and its bow planes were jammed. A large oil slick trailed its wake as it twisted and turned to dodge the machine gun fire from the two PBM's. Despite its wounds, the submarine made four attempts to submerge, in one of which everything but a quarter of its conning tower was below the surface.

Led Destroyers To Spot

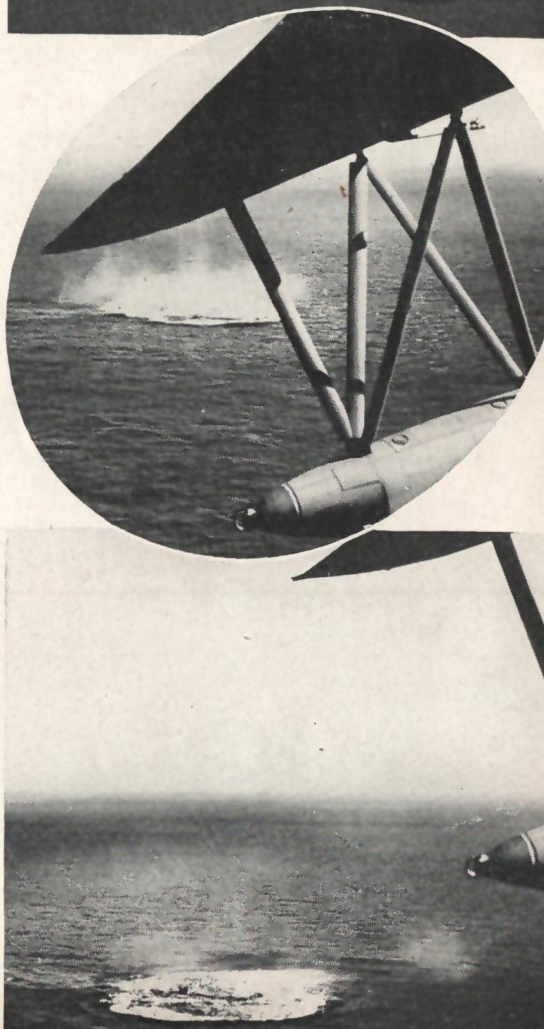
After half an hour, when it became certain that the German craft could not get away, Lieutenant Davis' plane headed for two destroyers, summoned by radio, which were racing toward the scene, and led them to the spot. In the meantime the sub lost all headway and began to settle slowly. Her crew jumped from the conning tower and manned the deck guns. The crew of "Nickle Boat" responded with a vigorous strafing, and many of the Nazis leaped into the water.

By the time Lieutenant Davis' Mariner returned with the destroyers, only the U-boat's bow and part of her conning tower were above the surface, and most of the crew was swimming alongside. Five direct hits from the destroyers' guns quickly finished off the enemy raider, and "Nickle Boat" and her sister Mariner circled overhead and dropped life rafts as the destroyers picked up the survivors.

"Nickle Boat" earned the second of those images on her bow on an even more dramatic mission. The commander of her victim, now a prisoner of the United States Navy, was none other than Kapitanleutenant Friedrich Guggenberger, one of the most famous U-boat commanders of the present war, who was decorated by the German Government for torpedoing and sinking the British aircraft carrier H.M.S. Ark Royal in the Mediterranean on November 13-14, 1941.



"Nickle Boat" makes the first kill. This dramatic series of official Navy photos shows, at left, "Nickle Boat" releasing her "ash cans" while strafing the sub's deck; then the explosives let go and raise a geyser of water. The sub sinks beneath the surface of the water and leaves no trace but an oil slick and bits of floating wreckage.



And her victim was one of the most modern Nazi U-boats.

It happened while "Nickle Boat" was flying a solo patrol in the South Atlantic area. Aviation Radioman, Second Class (now First Class) William S. Stotts, Boise, Idaho, spotted a long, dark object far away on the surface of the ocean. He notified his pilot, Lieutenant (jg) Roy S. Whitcomb, Long Beach, Calif., and the second pilot, Aviation Pilot, First Class Donald T. Ward, Cincinnati, Ohio. Ward lifted his binoculars, and scanning to starboard, quickly tugged at Lieutenant (jg) Whitcomb's arm. There, more than twelve miles away, was the object first spotted by Stotts. It appeared to be either a PC boat or a large sub. Lieutenant Whitcomb trained his binoculars on the craft and identified it as a submarine.

Sub Fired Back

He quickly turned "Nickle Boat" to port in order to gain temporary advantage of a cloud cover and to be in position to deliver an attack from out of the sun. But about this time Kapitanleutenant Guggenberger's sub sighted the plane. Anti-aircraft fire poured from the raider's after deck gun as it began a sharp turn to starboard and increased its speed.

The U-boat gave the impression of getting ready to dive, so Lieutenant (jg) Whitcomb decided to begin his attack run immediately. Increasingly heavy fire, including tracer shells, poured from the submarine. Lieutenant (jg) Whitcomb maneuvered "Nickle Boat" to present as difficult a target as possible for the opposing guns and at the same time to get into the best possible attack position. Kapitanleutenant Guggenberger decided not to dive, and increased his U-boat's rate of fire. "Nickle Boat's" attack, however, was accurate. Co-pilot Ward released the bombs from an altitude of only 50 feet. The drop completely straddled the sub, two of the bombs striking the raider's deck, and the others landing close aboard on the port and starboard sides.

The U-boat was blasted right out of the water. Then boiling water and intermingled brown stains were all that could be seen. Returning to the spot about a minute after the attack, however, the Navy fliers saw spreading oil, various brown discolorations and fifteen to twenty survivors in the water.

At Lieutenant (jg) Whitcomb's direction a life raft was dropped in the midst of the Germans. Then "Nickle Boat" hovered over the scene for two hours until relieved by another Mariner from the same squadron which stood by until seven survivors, including Kapitanleutenant Guggenberger, were picked up by a U. S. Naval seaplane tender.

Following this attack, all seven enlisted members of "Nickle Boat's" crew received advances in rating.

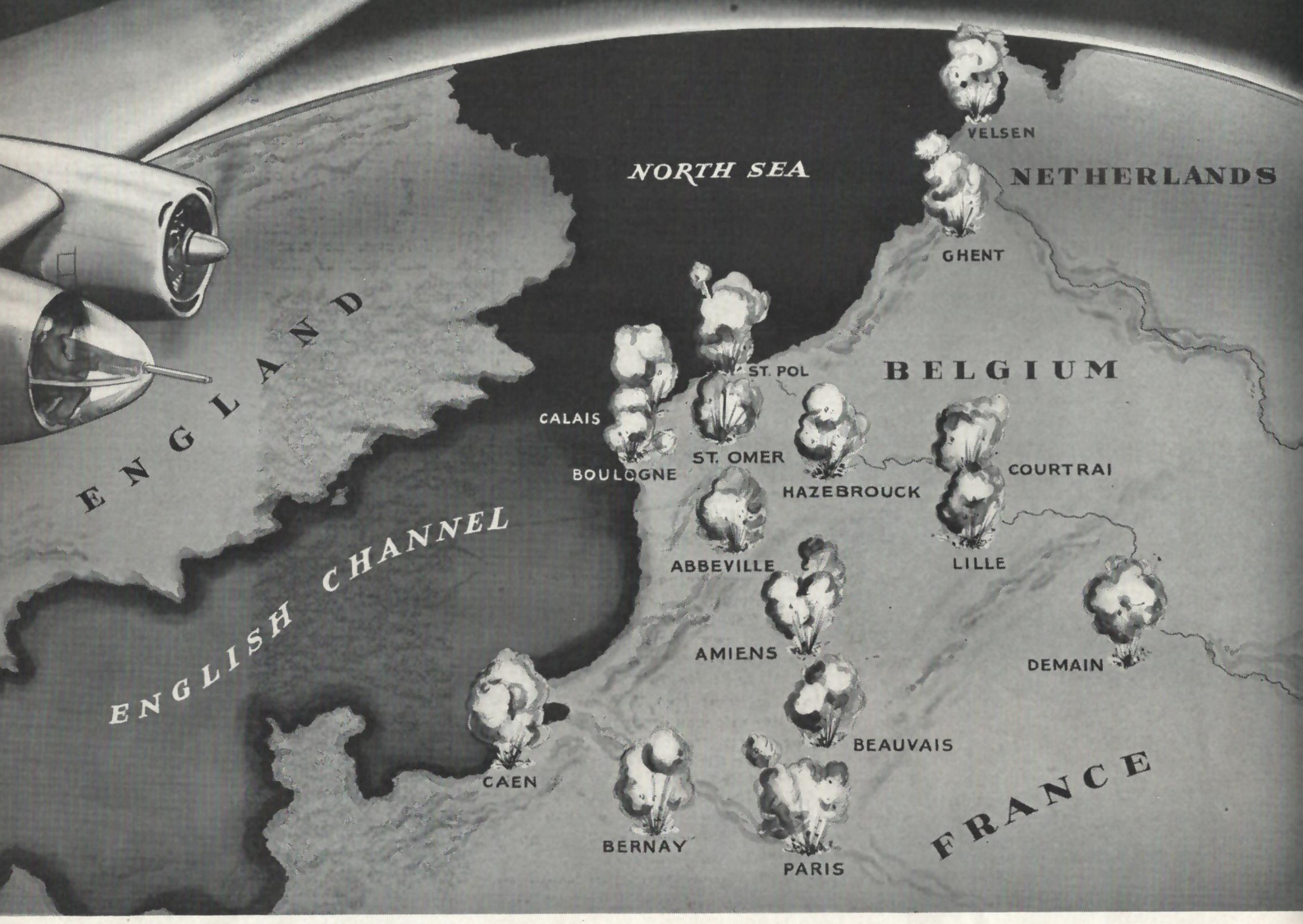
In a few days a reconditioned and modified "Nickle Boat"—better able than ever to deal destruction to Hitler's wolf packs—will be heading back to the war zones bent on adding to the collection of white submarines on her nose. Where she will go, or who will fly her—she has already had at least six pilots in addition to Lieutenants (jg) Carey and Whitcomb, is a matter the Fleet will decide.

But wherever she goes, or whoever flies her, one thing that the men and women of The Glenn L. Martin Company—the men and women who built her—know is that she and her sister Mariners will continue to give a good account of themselves.

Proud Of Her

The men of the squadron from which "Nickle Boat" came are mighty proud of those two submarines on her nose, but they are no prouder than the Martineers who gave her life, and who feel that those two U-boats, and the many others destroyed by other PBM's also belong to them.

It's been a privilege for the men and women of the Martin Company to have "Nickle Boat" in their midst—even for the brief period necessary to modify and recondition her. As she leaves once again for combat, all they can say is "Keep up the good work, while we turn out ever-increasing numbers of sister ships to help you!"



The map above shows but a few of the many places in Fortress Europe which have been raided by England-based Martin Marauders, and others are being added almost daily. If the artist had squeezed in every raid—well, the puffs of smoke would almost obliterate the map.

Marauders Play For Keeps

By ROGER WARD

When Roger Ward went to England several months ago as factory representative of The Glenn L. Martin Company, he was asked to keep his eyes open for unusual stories about Martin bombers in the European theatre. That he kept them wide open is evidenced by the many swell yarns he has sent back, one of which begins on this page. Another from him starts on Page 10. There will be plenty of others later, Mr. Ward assures us, because Martin planes are writing more than their share of history wherever they go into battle.

IT was Friday, May 14, when the boys in the Marauders started "playing for keeps" in the European Theatre. Since then they have proven their mettle by participating in 4,000 sorties on 75 missions with only 13 losses—the most remarkable safety record of any American combat plane. And it was accomplished on the day shift, which may be the favorite in the States, but is the "graveyard" shift over here. In broad daylight you must stay so high they can't reach you or so low they can't see you coming until you've gone.

But this is the story of the beginning—when B-26 Marauders from English bases roared over Axis bases in Holland at tree-top level, or "zero" altitude. Although 15 or 20 feet may be far from safe, you have a chance with a good ship and a good crew.

It was a beautiful sunny May morning, unusual in these parts—an unusual morning, too, because you could feel something in the air that hadn't been there before—expectancy. The armament crews were not loading practice bombs and ammunition, but the real thing. The flight personnel had all been called to the briefing room for secret instructions.

It seemed hours before they came out, in their yellow Mae Wests and flight togs, and scattered to the "hard spots" where each ship was dispersed. It seemed long, but actually it was only a matter of minutes when the elements of Marauders were streaking for the coast.

Then time stopped completely. The hours they were gone seemed infinity. We looked at our watches constantly but the hands didn't move any faster. Some of the ground crews tried to occupy themselves with odd jobs, but it was no use. Our thoughts were all with those sleek ships and their crews—the swell guys that only this morning were having their coffee and fried Spam with the rest of us in the mess hall.

By now they must have reached the heavy flak guns on the coast. Had they caught the gun crews off their guard? Could they squirm their way fast enough through those lashing streaks of red fire and puffs of black? And if they did, could they dodge the light flak inland? How about the 20 m.m. stuff? Would they run into fighters besides? Those and hundreds of other thoughts ran through our minds.

We didn't have much stomach for

(*Continued on page* 16)

Despite Age; "Gran' Pappy" Going Strong

"GRAN' pappy," the very first Martin B-26 Marauder and grand old man of the Army Air Forces, is a sprightly cuss. The bomber that was known at The Glenn L. Martin Company as No. 1226 and by the Army as No. 40-1361 is still doing a bang-up training job.

Last August at Laughlin Army Air Field, Del Rio, Texas, it set all endurance records for training planes by hauling pilots on combat training flights for 218 hours. It has recently been transferred to the Dearborn Engine School, Mich.

"Gran' pappy" also has the distinction of being about the only first bomber of any type in the Army Air Forces still on active service. Many of the other firsts were cracked up. But "Gran' pappy" has handled its fledgling pilots without serious mishap and no casualties of any kind.

Since it entered the Army long before Pearl Harbor, it has used up 300,700 gallons of gasoline. That is enough to haul all the Martin C coupon holders to work and back home again for a full two weeks.

Just three years ago, when there were far fewer employees at the Martin plant, finishing touches were being put on a bright, unpainted B-26 Marauder, then bearing a mere number for its designation. In fact, today is the third anniversary of its original taxi tests.

Passed Tests

On November 29, 1940, W. Kenneth Ebel, vice-president of engineering, took off on the first Martin flight test. Six days later No. 40-1361 came roaring in to a successful landing without brakes at Bolling Field, Washington, D. C. On New Year's Day, 1941, the Marauder successfully completed its speed tests at Bolling. Eleven days later the Army began test flights with Col. Stanley Umstead at the controls.

"Gran' pappy" had several accidents. One occurred on the taxiway when the ship began rocking and swaying in a high wind and the nose wheel collapsed, damaging the plane's nose mechanism. On April 28, 1941, while on a fourth landing during severe tests the landing gear collapsed and "Gran' pappy" skidded 1,000 feet on its nose, damaging both landing gears, the props, fuselage and wings.

Soon afterwards it was back in shape again and off to the Army for training purposes. This job it did well at Patterson Field, Ohio; Jackson Army Air Base, Miss.; Harlingen Army Gunnery School, Texas; Tarrant Field, Texas, and Laughlin.

At Laughlin alone it trained more than 100 pilots. It was also here that a second set of engines were installed last July, as well as the addition of desert cowling. This base is commanded by Col. George W. Mundy.

Two crews, working day and night under Major J. W. Stutts, Laughlin maintenance officer, kept "Gran' pappy" in flying condition during the record-setting month. He credits the fine flight record on the "pride of Flight A, 62nd Squadron," in part to the crew chiefs and their men.

They are a couple of ex-farmers. Sgt. W. W. Green was a potato-raiser in Idaho before entering the Air Corps in March, 1941, and Sgt. W. P. McKinney is from Louisiana. One week "Gran' pappy" flew 55 hours with little extra maintenance. Asked if there had been any unusual experiences while at Laughlin, Sgt. McKinney replied:

"Once a former test pilot, who had been stationed here, got caught in a thunderhead and drove through it about 425 miles an hour. It tore the rudder, but he brought the plane in okay."

"Gran' Pappy," the first Marauder, can fight and fly with the best of 'em if they'd let him, but the Army Air Corps has found him more useful as a trainer. Plenty of Marauder pilots have learned how at "Gran' pappy's" controls.

Hartson Elected To Head Martin-Nebraska Company

Election of Joseph T. Hartson to the presidency of The Glenn L. Martin-Nebraska Company at Omaha was announced recently.

Mr. Hartson came with The Glenn L. Martin Company in 1935 as assistant to Mr. Martin and was later elevated to the executive vice-presidency of the organization. The new head of the Nebraska company has spent nearly 27 years in the industry.

He was long an officer of the Boeing Aircraft Company, serving as an aeronautical engineer and later as assistant to the president and secretary of that company. As sales manager of the Wright Aeronautical Company, he sold Charles Lindbergh the engine which took him to Paris. He also sold engines to other ocean trail-blazers—Byrd, Chamberlain, Sir Hubert Wilkins, Maitland, Kingsford-Smith, Hegenberger and Haldemann and others.

He will continue to serve the Baltimore company as executive vice-president.

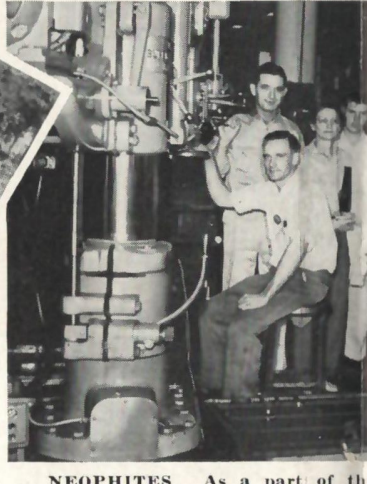
As technical expert on the Federal Aviation Commission in 1933-34, Mr. Hartson contributed to one of the industry's most comprehensive reports, an investigation arising from cancellation of air-mail contracts.

SANDMAN. Not the kind that puts little children to sleep, Sandman Joe Edwards does his job in Finishing and Plating, second shift.

DOING HER SHARE. While two sons swap punches with Hirohito's rats as members of Uncle Sam's Navy, and a brother serves in the Army, Sybil B. Mathews, below, helps turn out bombers at Martin-Nebraska.

ON BOND WAGON. Wood Shop tion, went overboard in the recen ber of the department bought a more.

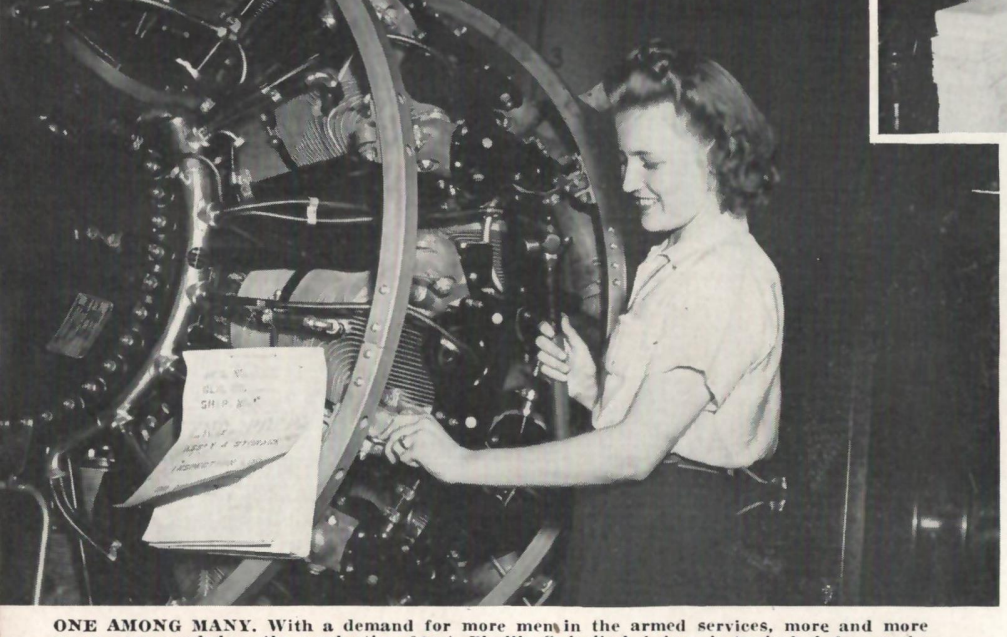
HELP PATROL AIRWAYS. Members of Section E of Squadron No. 3, right, spend their spare time working with the CAP. They're all Martin-Nebraskans.



NEOPHITES. As a part of th Nebraska plant, new employees a chinery at work. Here, Dean Nord a radial drill operated by W. E.

FROM ALASKA TO NEBRASKA. Walt Halsey, Industrial Engineering, left, and Lester Lynch, cook at Modification have been together before. They first met while working on the Alcan highway in Alaska last year.

TIME ON THEIR HANDS. Dorothy Algreen and Jean Weiboldt, second shift Timekeeping, check through hundreds of first shift time cards as a part of their daily task.



ONE AMONG MANY. With a demand for more men in the armed services, more and more women are needed on the production front. Phyllis Cederlind, below, is typical. A few weeks ago she had never seen an airplane engine.

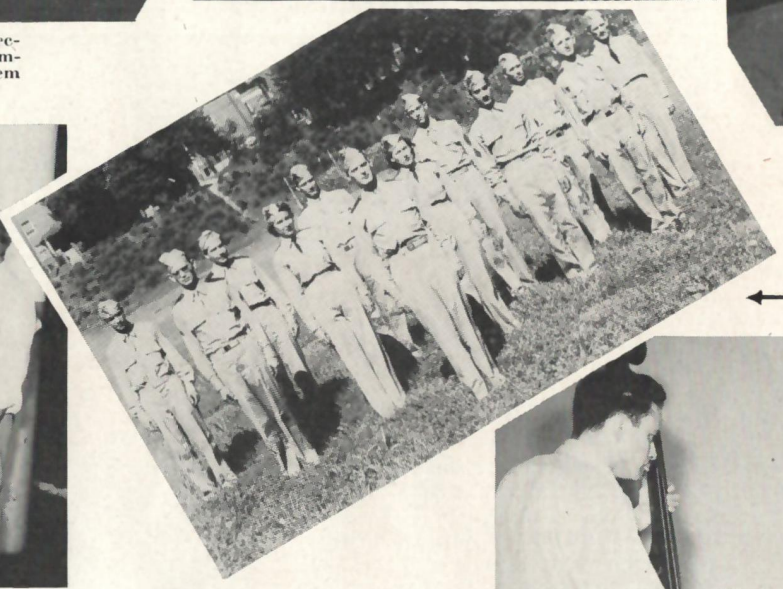
FORTY-SECOND AND BROADWAY. Busi is that held down by Industrial Relations intersection.

led by Tony Proskovek, Inspec-
war loan campaign. Every mem-
least one bond—some of them

CELEBRATES ITALY'S SURRENDER. Guard Albert Ciancanelli, below, whose parents are native Italians and good American citizens bought $1,800 worth of bonds when Badoglio surrendered. Asst. Protection Chief G. F. Russell looks envious.

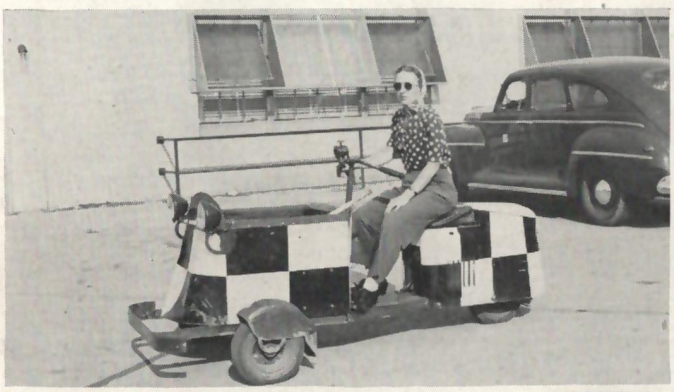
HELPS SEND 'EM AWAY. Winifred Stertz, whose husband works in Army Inspection helps keep the Ferry Command Control office functioning.

eir introduction to the Martin-
re shown the many types of ma-
lin, right, explains the secrets of
Southard.

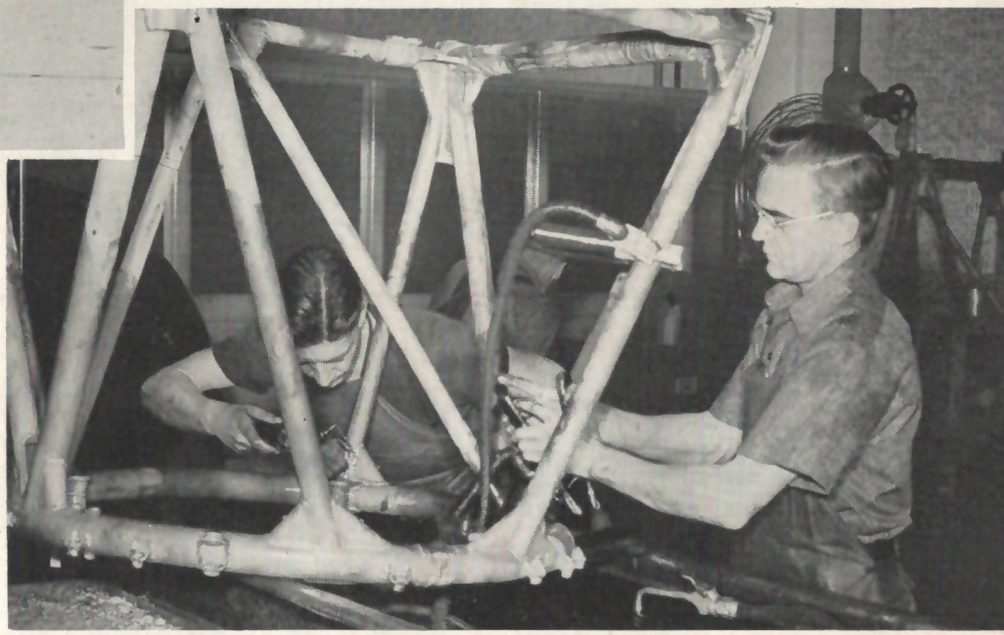


MARTINEERS FLY 'EM TOO. Here's Squadron No. 3, Flight D of the CAP, left, all Martineers. Nine are from Ground Test, the other three from Modification.

BOND SALESMEN. Rehearsing for the "Bond Wagon Show" that served as a starter in our recent bond drive are, from left to right, Irv Chudacoff, G. E. Ackles, Herb Riddle, Glenn McCord and Ding Elerding.



DOODLE BUG JOCKEY. Helen Clark keeps tab on the status of planes at the airport and the "Doodle Bug" saves shoe leather and provides plenty of fresh air.



FAULT FINDERS. Eugene Clifton and Ray Martin make mistakes their business. The machine they operate shows up defects in motor mounts.

est corner in the plant during rest periods
. Here's a bomber's eye-view of the busy

New Oil Mixture Developed Here

Someday, the name of Herbert Ross, chief oiler for the Maintenance Dept., 1st shift, at Martin-Nebraska, will be blessed by oilers and machinists alike. In fact, not a few Martineers with appreciative noses are doing it right now.

Here's what happened: one of the things that Ross didn't like was "the obnoxious odor" of thread grinding oil. Instead of holding his nose and doing his job with one hand, he set out to find something which would neutralize the stench of the oil. In the course of his search, he tried, of all things, pine oil and found it was just what he was hunting.

He found, too, when he put his "perfumed" oil to work, that it was useful as well as beautiful. One of the banes of the life of machine shop oilers had been metal chips which sank to the bottom of the oil and made a nightmare out of the job of keeping the coolant pumps clean. The new formula was found to float the chips, so that they could easily be taken from the liquid.

Herb has been interviewed by representatives of a number of oil companies, who have stated that his discovery is a valuable one and one that is "nose-appealing."

★ ★ ★

She's Convinced Planes Will Stay

Another Martineer who used to fly 'em and now helps to build 'em is Ann Neilsen in Plant and Equipment at Modification. Ann held a private license until recently and used to spend every spare minute she had flying. She obtained her flying instructions here in Omaha and had the dubious distinction of taking her test with one motor missing.

She is also one of the few people to walk into a turning propeller and live to tell the tale: Ann had just finished her first cross-country and being a little excited, she tried to take a short cut around the plane, cutting through the propeller. The incident only broke her collar bone and cut open her back, but Ann says she is a little embarrassed about this because she did have 20 solo hours to her credit and she should have known better.

Ann isn't the only member of her family to tie up with aviation. A brother Lloyd, 29, is in North Africa as a bombardier in a B-17; he has been in the service since March, 1941, and has been in North Africa since January of 1942.

Another brother, Arthur, 23, is an aviation cadet at Ellington Field, Texas. Art entered the service in September, 1942, and also has flying hours to his credit. Even Ann's sister works for United Air Lines in Cheyenne, Wyo.

It seems to be a little difficult to keep those Nielsens away from those planes.

Opportunity to Serve Country Is Found at Martin-Nebraska

Protesting that because of his perfect health and long and pertinent experience in related lines of instrument work, "the color of my hair should not prevent my doing my bit to help lick the Axis when younger men are giving their all," W. Hiram Wadleigh came to Martin-Nebraska in January, 1943, with an interesting and valuable background that has made him an asset to this company.

Coming from Washington, D. C., where for the past twenty years he and Mrs. Wadleigh resided while Mr. Wadleigh was engaged in research work as Physicist at the U. S. Bureau of Standards, he specified that he sought primarily, not a salary, but an opportunity for service.

He spent two years as an Instrument Designer and Mechanical Draftsman for the U. S. Coast & Geodetic Survey and also taught Physics and related branches in colleges and universities for thirteeen years.

In addition to his work in Washington, Mr. Wadleigh spent the mid-winter months of 1920 as one of seven U. S. government-delegated scientists aboard the Brazilian battleship "Sao Paulo" anchored in the Caribbean Sea testing the performance of the British-built twelve-inch wire-wound guns of the ship for the Brazilian government.

Designing and supervising the building of the Curtis-Wadleigh camera, designed to take up to 3,000 pictures per second of projectiles in flight from heavy artillery and the larger naval guns next consumed his time. In testing out this camera later, he spent the early winter of 1920-21 aboard the splendid battleship, U. S. California during that ship's winter maneuvers and firing tests off Southern California. This ship, at that time the Flagship of the Pacific Squadron, was later sunk by the Japs at Pearl Harbor, and is now raised and undergoing repairs preparatory to further service.

While at the U. S. Bureau of Standards, Mr. Wadleigh had charge of the Radium and X-ray laboratory for four years, measuring and certifying some fifteen million dollars worth of radium for the American public, including the gift of one gram of radium (then worth $110,000) given to Madam Marie Curie, discoverer of radium's use in combating cancer, by the Federated Club Women of America. In his capacity as chief of the Bureau Laboratory, it was his privilege to have Madam Curie in his laboratory for a day and to later take the gram of radium to her in New York City, to present it to her on the occasion of her embarking for the return to her beloved France aboard the giant steamship Olympic, and to bid her "bon voyage."

Saying that he is, primarily, a "modified pacifist," Mr. Wadleigh feels that when nations "run amuck" and cease to be amenable to reason, they, like individuals who do thus, must be dealt with by force. He is therefore enthusiastically supporting the idea of a Federated World, a World Government and an International Police Force following the close of the present war to suppress any aggressor nations.

W. Hiram Wadleigh, Instrument Technician at Modification laboratory.

He feels that we must be planning for it now, determined to avoid a Peace Treaty which shill prove only another "Armistice." Preparatory to that end and "until the shooting stops," Mr. Wadleigh expects to continue his work as Instrument Technician or where he is most needed at Martin-Nebraska.

In addition to his work at the laboratory at Modification Center, he has been selected to teach one of the Math classes during the coming months. An alumnus of the Iowa State Teachers' College, he holds the degree of Master of Science in Physics from the University of Michigan.

★ ★ ★

Store to save. Find out how each food keeps best, and store each article in the right, and correctly cared for, cupboard, cooler, can, or jar.

These people demand perfection. The three pictured here, Roberta Burke, Doris Leesley and Hubert Nelson, check carefully the numerous items listed in the log book held by Nelson. It's their job to check the various items for quality.

Honor Boards Kept Up To Date

Josephine Catalano of Raw Stores, first shift, takes especial pride in her work of keeping the honor boards up to date, because she has three brothers in the service and also a certain someone in whom she is interested.

It's her work to keep track of Martineers who enter the armed forces, get the name cards made and keep the boards posted. At the present time there are three boards—one each at the plant, hangars and Modification. It is probable, however, that more will have to be made.

The three brothers are in the army, air corps and navy: Joe, who is 24, has been in the infantry for a year; Tony, 19, has been in the Air Corps for a year and is now at Santa Ana; and Vincent, who is only 18, has been in the navy for two months and is at home on a furlough. Josephine's special friend is in the air corps, too.

The honor board job, which is in addition to Josephine's duties in Raw Stores, keeps her busy with an average of forty or fifty Martineers leaving each month to fight for Uncle Sam.

STORK DEPARTMENT

★ To Mr. and Mrs. Eugene Nehe (Metal Bench) a girl, September 9. ★ To Mr. and Mrs. Russell Kerns (Assembly), a boy, September 6. ★ To Mr. and Mrs. Kenneth Bornemeier (Assembly), a boy, September 19. ★ To Mr. and Mrs. David Hiatt (Assembly) a boy, August 24. ★ To Mr. and Mrs. Fred Vipperman (Assembly), a girl, September 1. ★ To Mr. and Mrs. Robert Ruhl (Protection), a girl, September 19. ★ Mr. and Mrs. Roy Fuller (Final Assembly), a boy, July 26. ★ To Mr. and Mrs. Kreycik (Engineering), a girl, August 30. ★ To Mr. and Mrs. Howard Griffith (Finishing & Plating), a girl, September 14. ★ Mr. and Mrs. Daniel Garrison (Electrical), a boy, September 24. ★ Mr. and Mrs. Sherman Hill (Machine Shop), a girl, September 27. ★ Mr. and Mrs. Jack Q. Miller (Modification Final Assembly), a boy, October 1, 1943.

Winged Terrors Invade Nebraska

So far as Martin-Nebraskans are concerned .50 caliber slugs from the tail guns of an enemy fighter would be welcome in comparison with the threat carried in the tail guns of droves of wasps now controlling the air in the factory and office buildings at the Fort Crook establishment.

With a slightly shorter wingspread than a B-26, these Nebraska marauders have brought confusion into more than one ordinarily quiet area in the plant and at Modification. Even the more daring cringe when one of the winged devils makes an appearance, which is all too frequent for anyone's peace of mind.

Various types of anti-aircraft guns have been suggested ranging all the way from Flit guns to fly swatters and rolled newspapers or magazines. Those who have come in contact with the wasps urge caution, inasmuch as a wounded wasp is no good in anybody's office. In fact, they are downright dangerous. Nothing but a direct hit will do the trick. A second chance is sometimes lacking, inasmuch as wasps have a tendency to make quick recoveries. And, since they have evil tempers to begin with, they waste no time in returning to the attack.

★ ★ ★

Confusing, No Less

Third shift Sheet Metal was thrown into a state of confusion recently when several Martineers in that department suddenly became convinced they had the vapors or were at least suffering from some eye ailment.

Cause of it all was Verna Busch, an inspector transferred from first shift. Verna, it seemed, had a habit of being in two places at once—or at least so it seemed to several Martineers. Later it was discovered that Verna had an identical twin, Verda, who works in Tubing, third shift.

Quality Demanded By Martin Inspectors

By the time a Nebraska-built bomber has been released to the Army to start its journey to the fighting lines, approximately 4,000 separate inspections will have been made by the scores of men and women who have been carefully trained to do this highly technical work. The Inspection department under the direction of Quality Manager William Burroughs holds an "A" rating with the Army which signifies that all inspections are accepted as satisfactory.

Inspections on the ship proper are only a part of the many checks that must be made before the plane is completely assembled. All of the hundreds of parts are carefully inspected before entering the factory and then again after they get here. Some material and many of the parts are subjected to laboratory and magnetic tests to make sure they comply with the high standards of quality demanded. The four essentials of efficient inspection, according to Burroughs are, proper installation, security, safety and operation.

Aiding Burroughs in this important task are Chief Quality Engineer K. F. Wasmuth, J. R. Davis, chief inspector, and C. K. Reed and J. C. Jackson, assistant chief inspectors. These men direct the work of several hundred men and women inspectors on the innumerable jobs done at the Main Plant, Camouflage, the Hangars and Flight Test.

Since the Inspection department personnel is required to pass on the quality of parts in Detail Manufacturing, Assembly and Final Assembly, it becomes the duty of the Inspection Planning Group to receive, compile and issue the necessary items that require inspection in obtaining a perfected airplane. This work is accomplished by the Inspection Planning department coordinating with the Quality Engineer, Chief Inspector and certain divisions of the Production department. This division is under the direction of Lloyd Hadsell.

The completed form of all these sources of information is called a log book which is nothing more or less than a history of everything that has been done by the craftsmen and which has been accepted by each inspector involved. The department also makes up forms, procedures and methods to enable each inspector to have a clear picture of what is expected of him.

In addition to the Inspection and Inspection Planning departments, there are the Personnel Administrative and Equipment Coordinating departments, both of which contribute to the over-all activity of the inspection program.

★ ★ ★

Milkweed oil, chemically similar to soybean oil, can be made edible. 100 pounds of weeds yield 21 pounds of oil. A process for extracting oil from grapeseeds has been developed by a California professor. Salad oil is made from flaxseeds also, in fact farmers grow flax chiefly for its seed, not for fibre as it is generally believed.

Leverett Archibald and Einar Gustafson, making a "mock-up" of a stabilizer in the Wood Shop. This work calls for skill and precision.

Martin Carpenters Best Available

If it can be made from wood at all, the men in the Martin-Nebraska wood shop are just the guys who can do it, and you can bet they will do a good job and do it rapidly.

The activities of this particular department are many and varied. For instance, they manufacture many of the tools used in the building of airplane parts, make many small detail parts slated for inclusion in the plane itself, work on patterns for dies, make mock-ups, spot-weld fixtures, jigs, boxes and crates. In doing these jobs, the men work with all types of wood and every tool known to wood workers. The men not only must be experienced and skillful, but must also be able to read blueprints and, when necessary, work to within a thousandth of an inch of specifications.

Most of the really fine work is done at the benches by hand. The men doing this type of work are the most highly skilled craftsmen available.

Among the numerous activities of the wood shop is the job of building the crates and boxes which contain spare parts that are shipped to combat areas all over the world. These boxes must be strong and constructed so that the parts fit into them snugly. And, while these men in wood shop swing their hammers, they get a great deal of satisfiaction out of knowing that every nail they drive is just one more nail in the Axis coffin.

This hard-hitting crew works under the direction of General Foremen Frank Bascom, first shift, and George Hull, second shift.

Orange Blossoms

★ Ruby Peterson (Turrets) to Vic Johnson (Final Assembly) August 28. ★ Beuhlah Hummel (Timekeeping) to Albert Ditzler (Sheet Metal) September 19. ★ Bernard Kanis (Sheet Metal) to Ava Marie Proper, September. ★ Jane Augustine (Timekeeping) to Howard Johnson (Assembly) September 25. ★ Phyllis Perkins (Car Dispatching) to Lt. Howard Aleff, October 15. ★ June Holm (Education) to Ensign Stephen M. Hall, October 22. ★ Rhoda M. Budwill (Turrets) to Stanley S. Uldier, October 2.

"Porky's" Family Has Right Dismal Outlook

In spite of the meat shortage, the Bob Morgan (Turrets, first shift) family of five should fare pretty well this winter, for, come butchering time, two little pigs that have been living on the fat of the land for the past several weeks will be just the right size. Bob and his family are looking forward to pork chops, baked ham, spare ribs or sausages and they won't have to give up any stamps, since the pigs were born and raised right on Bob's small farm at Eighty-ninth and Charles Streets.

Last summer, Morgan's son, Bob, junior, spent his vacation on his uncle's farm, and when he returned home to school, his uncle gave him a purebred Hampshire pig that had just been weaned. A nice pen was made for it in the chicken house, and it became a family pet. It was named "Porky" and under the ministering care of the Morgans it attained its full growth.

Now, "Porky" has a family all her own —eight little squealers. They don't know it, but plans for their future have been made and will be carried out. Six of them will be inducted in the South Omaha stockyards when they attain the proper weight and size. Two others have been deferred, and will remain at home on the farm until butchering time when their critical occupation of growing big and fat will have ended.

Josephine Catalano, Raw Stores, pins up the last name in a row on the honor board in the cafeteria. She is kept busy keeping these boards as nearly up-to-date as possible.

Gail Hood, who once produced shows for Ringling Brothers and Barnum and Bailey Circuses, today plays an important part in the "Big Show" that involves all of us. Employed at Martin-Nebraska's Modification Center, Gail works on the .50 caliber machine guns slated for installation in our fighting planes. At one time he worked with Bob Hope (then known as Lester Hope) and helped start Joe Penner of "Wanna buy a duck fame" on his way. George Burns was another of Gail's acquaintances. Last year Gail helped stage shows for the men stationed at Ft. Crook and expects to get back into the show business after the war is over.

★ ★ ★

There is nothing which cannot be perverted by being told badly.—TERENCE.

"—And We Worry About Deductions"

We at Martin-Nebraska thought we had troubles when we've discovered our deductions to be almost bigger than our actual check, but how would you like to stand in a pay line for two solid hours and then receive a check for the amazing sum of ninety-seven cents?

It not only can happen but did to Marie Wright's soldier-husband. Marie, a station wagon driver in Car Dispatching, received a letter from her husband recently telling of this incident; evidently bond deductions and two months' insurance cut a sizable hole in his first army check.

Marie's ten-year-old daughter had the bright idea of sending her dad seven cents so that he could have an even dollar.

★ ★ ★

Dedicates Bond Drive to Martineer's Son

Guard Roy M. Gould, who is stationed at Modification, is the father of the late Richard Gould who was killed April 28 of this year in a plane crash at Parkersburg, W. Va. He was a Flight Officer with the 71st Ferry Squadron out of Nashville, Tenn., and had been in the service since August 1940.

The Omaha company for whom "Dick" used to work is conducting a "Buy a Bomber" bond drive, and the first issue of the "Buy a Bomber News," which will be published each week during the company's drive, has been dedicated to Roy's son.

Roy came out to Martin-Nebraska in June of this year.

★ ★ ★

What some invent the rest enlarge.—SWIFT.

"Our gal Friday"—that's what the Ferry pilots call Dorothy Henderson, Lt. Hartman's secretary at the Ferry Command office.

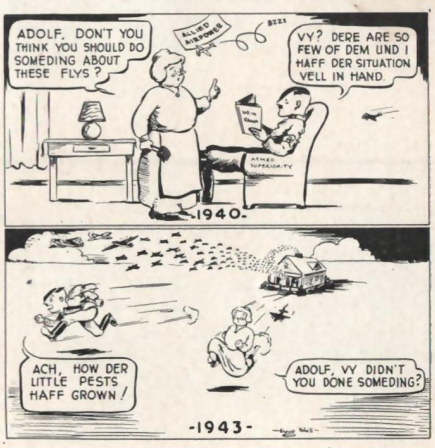
"Our Gal Friday" Aids Ferry Pilots

"Girl Friday Deluxe"—Monday through Saturday—is Dorothy Henderson, secretary for Lt. Howard Hartman, control officer of the Ferrying Command here.

Because she is advisor, confident, big sister, information bureau and handyman to the hundreds of Air Corps men who come into the control office at the Hotel DeGink, she has become indispensable in that office.

"Doty," as the boys call her, doesn't feel she is exaggerating when she says she has looked at thousands of pictures of wives, sweethearts, homes and dogs which they proudly display, and listened to equally as many stories of the pilots' flight experiences and personal problems. Consequently, in her period of service here, "Doty" has accumulated a large collection of big brothers.

She has already celebrated the first anniversary of her employment here, and to express the sentiments of the ferrying group, she hopes to continue to help keep them smiling while they keep them flying.


ADOLF, DON'T YOU THINK YOU SHOULD DO SOMEDING ABOUT THESE FLYS?
ALLIED AIRPOWER
VY? DERE ARE SO FEW OF DEM UND I HAFF DER SITUATION VELL IN HAND
1940
ACH, HOW DER LITTLE PESTS HAFF GROWN!
ADOLF, VY DIDN'T YOU DONE SOMEDING?
-1943-

Martineers Spirit Typical of America's Willingness to Sacrifice

Marguerite Goodman, third shift, Internal Transportations, maintains a home at 6324 Wirt Street, Omaha, and there are five men in the family. There is her husband, who is a chef and is away several hours during the day, and then her four young sons, Donald 14, Ronald 13, Charles "Corky" four, and Timothy, two. With Marguerite working an eight-hour shift, it would seem that she couldn't find time to do all the things necessary to keep such a household functioning smoothly, but in the Goodman home everything works in applie pie order. Here's how its done:

Donald and Ronald get the two younger brothers up in the morning and prepare breakfast. They do the dishes, do most of the housework and then go to school. When mother comes home from the plant, she pitches in and does what work the boys haven't been able to do. At noon, Donald and Ronald help with lunch and then return to school. Mrs. Goodman prepares supper and the two older boys do the dishes and help in what odd jobs there are left to do. Everybody in the family has something to do, and the part played by the two older boys doesn't interfere with their making good grades in their school work.

Marguerite has been a Martineer since September 12, 1942 and during all that time, in spite of the house full of men that needs her supervision, she has never been absent from work. She was tardy one day last winter, but the streets were so icy and travel was so difficult, she couldn't help that. Hers is a splendid record that speaks for itself. Marguerite is just one of thousands of American mothers who are helping out on the home front—and how can the Axis hope to beat the Yanks when they are backed by such women.

Returning from a recent flight over Fortress Europe, the engine of one of a group of Marauders caught fire when hit by flak. A photographer in the leading ship got the picture above. (P. S.—The fire was extinguished and the Marauder and her crew got back safely.)

Marauders Play For Keeps

(*Continued from page* 8)

food at chow. If everything went right, the boys would be over their target at noon—how could we eat as if it were twelve o'clock on an ordinary day?

We beat it across to the taxi-way and watched the operation tower for some clue to things and listened for the best music we could wish, the returning thunder of our Marauders. Finally it came, the unmistakable roar of double *Wasps*, and more than one ship, too. They must have made it! One, two, three—finally we could count all but two, as they came in Indian file to land.

Even as they rolled down the runway though you could see they weren't much like the ships that left that morning. Some had great holes torn in their fuselages. Most of them were slimy with either engine oil or hydraulic fluid. All were pock-marked with flak and bullet holes.

Ship In Distress

Then our attention was attracted by the return of one more ship. This one was in distress though and was circling the field. Her bomb-bay doors were wrecked and hanging open. A large calibre shell had blasted most of the left hand nacelle door away and must have damaged the landing gear inside. Intermittent sprays of hydraulic fluid blew back from the open bomb-bay. The right wheel and nose wheel were coming down, but not the left.

It was Major Celio's ship, Number 96. Operations told him to take the plane upstairs and abandon ship. But the Major still circled around. They ordered him again to abandon ship, but he still circled the field—not much hydraulic spray was coming out now—we figured it was all gone. But we were wrong.

Major Celio radioed down that Sgt. Cook was sliding around the cat-walk in the open bomb-bay, without a 'chute, but with a pair of pliers crimping the severed hydraulic lines, hoping to effect enough repairs to get the left-hand gear down. For over an hour we watched them circle the field and finally, slowly, as if straining every muscle the left gear swung down into place—only to reveal that the left tire had been nearly shot to pieces.

So for the third time they told the Major to desert his ship. Now Major Celio likes Marauders and particularly his ship. Many a time he had patted her sleek nose when she had brought him in before. So you can understand why he still rejected the control tower's advice—he couldn't let 96 down, she had been pretty good to him.

"This is going to be a major repair job, so I'm going to land at the B——— repair depot. Send a car over for me and the crew."

"Old 96" Made It

And he did! With infinite skill and one rudder cable he nursed the ship onto the sod field favoring the blown tire, and "Old 96" rose to the occasion. As the weight on the flat tire increased it flew off, the wheel dug into the earth and flung the ship around like a pin wheel. Although she came to rest facing the opposite direction her landing gear was intact, but for the tire and wheel. Five days later she was ready to go back to work.

But how about one ship that was missing. Had we lost it? No. The last ship was safe and accounted for. "Too much of Texas" piloted by "Fearless" Fry had landed at a field near the coast rather than continue unnecessarily on the one engine still running. He had the hot spot of the mission, the last ship in the last element.

The enemy gunners, who missed the rest of the planes, could all turn and pepper the last ship, and they did. First a 20mm. shell pierced the front crankcase of his left engine and exploded. As Fry explained:

"We were travelling at low level and high speed. One of our biggest worries is losing an engine at low level, but we had enough speed to keep the airplane under control. Just as I had feathered the prop on the dead engine, a shell tore off the upper third of our rudder"!

Plenty Of Flak

It took all the strength of both Fry and his co-pilot 2nd Lt. D. J. Wallace to straighten out their course, leave the formation and head for home. Unfortunately the crippled ship had to skim over the roof tops of the city of Velsen and cross the harbor in front of what looked to the crew like every flak battery in Northwestern Europe. They wiggled through only to have the heavy guns fire their shells into the water ahead of them.

"We went through one spout just as it was dissipating," First Lt. C. F. (Lucky) Allen of Binghamton, N. Y., navigator-bombardier related. "Some water came up through the breather hole in the bottom of the plexiglass nose, but it didn't bother us."

"Lucky" Allen rather than kill the civilians had held onto his bombs while over the city but now that they had cleared land, let them go harmlessly into the water.

As it left the shore, however, one final shot from a 30 calibre gun entered the tail of "Too Much of Texas," flew up through the camera bay, the rear bomb bay, and entered the front bomb bay and veered to one side to damage two hydraulic lines.

Somewhere earlier in the encounter another 30 calibre bullet pierced the main oil line and the hydraulic suction line on the left engine. Under these circumstances it is easy to understand why "Fearless" Fry elected to land at a coastal field rather than to stretch his luck all the way to the home station.

Engine Wouldn't Quit

Perhaps the record for surviving sheer volume of damage goes to Lt. George H. Watson, of Hamet, Cal., and Co-pilot Lt. John H. Statts, of Wayne, Pa., flying ship 18075. Their right engine simply would not quit, even though the Jerries did their best to eliminate it completely. One 20 mm shell exploded just aft of the No. 4 cylinder, blasting away some of the engine cowling, three rocker box covers, blowing a hole at least one inch in diameter in the cylinder head. Another shell lodged in the engine mount cluster fitting at the front engine mount-ring, exploded, and pierced several small holes in the rear engine case. That engine mount, however, continued to carry the load and to do its work, even after the shell had added a jagged, lightening hole about three inches in diameter which the engineers had never contemplated in their design.

A third shell practically disposed of the tail nacelle fairing, and a fourth blasted a large hole in the side of the fuselage. In the meantime furious flak fire was perforating the fuselage with disturbing intensity. The crew were really distressed, however, when right

TALL STORY DEPT.

A. L. (Pop) Pawley, Mail Room, has been handling mail and packages for 35 years—first for the Baltimore Post Office, then for Parcel Post and more recently for The Glenn L. Martin Company. In the course of the mail routine, he has had numerous unusual experiences.

The experience that takes the "dressing" for Pop is the one about the dressed chicken.

A chicken had been sent by Parcel Post to the wrong address. Pop's superintendent sent him out to get the chicken, when the party to whom the bird really belonged called in to inquire as to its whereabouts. When Pop arrived the woman told him that the chicken was already cooking in the oven.

Pop marched in and took the chicken out of the oven, wrapped it up in a newspaper and delivered it to the correct addressee in time for dinner. It was probably the first and last time a cooked chicken was ever delivered—ready to eat—by Parcel Post.

before their eyes a piece of flak almost severed the elevator cable, leaving nothing but a few ragged strands to hold it together. One of the crew members had the presence of mind to apply first aid in the form of adhesive tape around the frayed cable to prevent further unravelling and stretching.

In spite of all this No. 75 carried on to perform its mission and return to its base. She was a sorry looking Marauder, however, that afternoon, for they counted a total of 311 holes in the fuselage and wings. A new engine installed, the battle damage repaired, and it was ready to go back to work in less than a week.

Shell Explodes In Duct

Ship No. 18042 also had a stubborn engine. A shell exploded in the right hand carburetor air duct, throwing small fragments into the blower. Although this made a sad mess of the blower, the Wasp hardly faltered. As if to further test her spirit, flak pierced one distributor cover, severed a high-tension wire and chewed into the distributor block; more of it penetrated the magneto housing itself; yet the engine still ran on.

Warren R. Hohl, Martin technician, reported on the damage:

"Both forward bomb bay doors were badly damaged. The forward bomb bay catwalk was crushed beyond repair in the aft section by the weight of the pound bomb. Then to make matters worse a bomb bounced through the doorway at Bulkhead No. 230 and proceeded to smash the rear bomb bay doors and badly buckled the top section of the rear bomb bay catwalk.

"The disturbance was finally heard above the roar of the engines and since the plane was nearing its target, it was decided to wait till the plane was over the target, and then, by opening the bomb bay doors, they could salvo the disengaged bomb. The flight engineer had crawled back to the rear bomb bay and pulled the fusing wire on the disengaged bomb just to make sure that the target would get the full benefit of the bomb. That took plenty of guts."

When 18072 returned there was a 20 mm. shell hole in the top fuselage, at the wing root, which had battered the upper longeron at this point. All battle damage occurring during this mission was from ground fire, since the Marauders were able, by virtue of their speed, to get in to the target and back before the fighters from the two fields which they crossed could get into action. On their way into the target the pilot, reported the necessity of very strenuous tactics to avoid not only the shell fire, but radio towers, chimneys, and even the masts of canal boats.

Hollanders Waved Back

The crew of the "Tondelayo" took a few seconds to watch the reactions of the Hollanders. Sgt. Walter Perry, of Burlington, N. C., said: "Farmers stopped plowing and looked up and waved just like they do here in England. We were so low when we went over a city we could see people ducking into shops. I opened up with my machine guns at several pill boxes that were shooting at us on the route back. Boy, I enjoyed that!"

"All I want to do is to get back and have a date with that blonde I saw standing on the corner," another said.

S/Sgt. Welburn Farrell, of Gainsville, Fla., radio operator on "Tondelayo" said that "one farmer we saw was trying to control his horse which was rearing up on his hind legs as he saw our formation.

"We saw some really beautiful fields of tulips some distance to the north of the target."

Tanks Stood Up Under Flak

The "Tondelayo" herself was no doubt too preoccupied to notice much, for by this time a 20 mm. shell had blasted its way through the left hand tail pipe of her exhaust, flak had got through her gas tank, and 50 calibre bullets had streamed through the wing flap and fuselage. The self-sealing tanks, however, stood up under the effect of flak and immediately sealed.

Ship 17979 did not draw so great a quantity of fire as some others, but one telling blow was struck. A 20 mm. shell crashed through the wind-shield and exploded at the "coffee grinder" wounding the pilot and the co-pilot. Lt. Chas. H. Lane, of Baltimore, bombardier, crawled aft to the co-pilot's control column and took over, while Radio Operator, T/Sgt. W. J. Taylor, of Del Roy, O., administered first aid to Captain Roland B. Scott, pilot, Macon, Ga., and Capt. Othel D. Turner, co-pilot, Sapulpa, Okla.

Oddly enough the one ship which came through unscathed was the one in which Brig. Gen. Francis M. Brady, Commanding General of the Medium Bombardment Wing, rode as an observer. Brig. Gen. Brady complimented the pilot of the "Chickasaw Chief," Capt. F. F. Rezabek, of Chicago, Ill. He said "The mission was very well planned and very well done. They laid their bombs right in there."

Went Third Of Way 'Round the World "On the Cuff"

Frank B. Fleischmann is one of those lucky fellows who has been around the world. He made the 26,000-mile trip in 1936 as a service representative of The Glenn L. Martin Company. In more ways than one he was lucky.

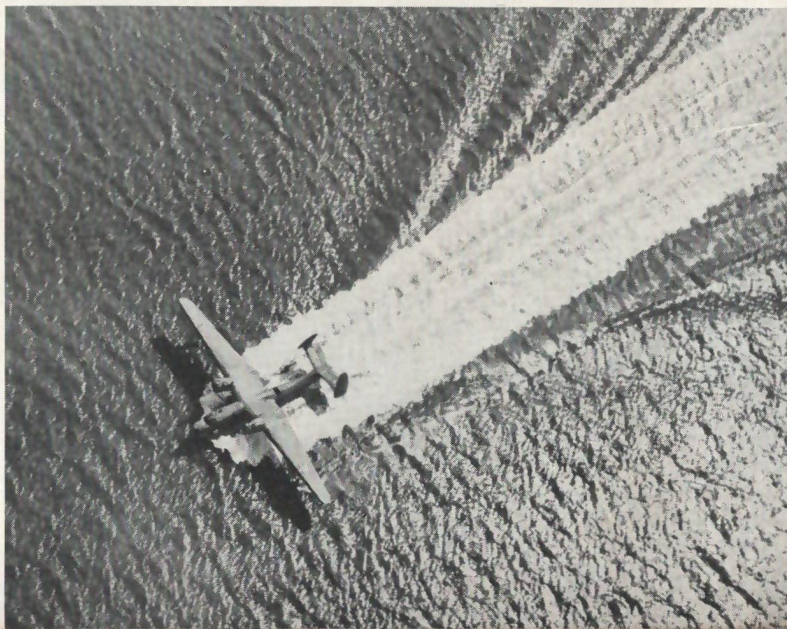
For a good portion of the trip was "on the cuff." His Martin checks did not catch up to him from the Far East to the Middle East, or nearly a third of the route. It was due to his many jumps in strange places. So he was taken along free until his money came through.

The trip, occasioned by an export order for B-10-B bombers, those speedy and revolutionary bombers which outmoded all previous bombers and pursuit ships, took him from Vancouver to Tokyo, to Shanghai, Hongkong, Manila, Bangkok in Siam, Batavia in Java via Medan in Sumatra, Rangoon in Burma, Karachi in India, Bagdad in Arabia, across Jerusalem to Alexandria in Egypt. He went on to Athens in Greece, Istanbul in Turkey and hence to Paris and Cherbourg, from where he embarked on the Queen Mary for New York.

Three years later he returned to France with the 167-Maryland bomber deal to set up proper tooling for the attack bomber at Caen, in Normandy. He was there when the war started and observed nine German observation air raids.

A native of Oil City, Pa., he served as a lighthouse tender and then in the Navy during the last war. He served on the cruiser, Galveston, convoying transports. At the end of the war he served in the Dardanelles, blowing up mines. He was discharged as a boatswain's mate, second class, in 1920.

For a while he was skipper on a yacht owned by W. J. Connors and later raced boats for Gar Wood. He has served with The Martin Company 18 years. Until recently he was general foreman in Final Assembly, D. Building, but, at present, is back with the Service Department.



A Martin PBM-3 Mariner cuts a pretty path through the sea as it takes off on one of its patrol voyages.

Mars

(*Continued from page 5*)

times.

Commenting on the performance of the Mars, President Glenn L. Martin pointed out that because she was the world's largest flying boat and the newest thing in aerial transport history, she was asked to prove herself far beyond the requirements for an ordinary airplane.

Met Every Requirement

"Not only did the Mars meet every requirement imposed by the Navy," he said, "but in almost every case she exceeded the performance demanded by a wide margin. The Navy asked for a 28 hour endurance flight. The Mars flew for 32 hours and 17 minutes and could have stayed up several hours longer but for the fact that the crew was getting tired. The Navy asked for dives and pull-outs at 2.7 g's. The Mars responded with dives and pull-outs at in excess of 3 g's."

Mr. Martin expressed the belief that more of these huge flying ships are the answer to the pressing need for fast transport of men and critical materials to distant war zones.

"The recent full load endurance test is most significant," he remarked. "The Mars probably never will be asked to travel such a distance, non-stop again. But she has answered the question of ultimate performance. Henceforth, the ship will bear heavier payloads on world route with legs of not more than 2,500 miles.

"In my estimation, the fact that this type of ship can carry as much as 20.16 tons of payload to any point on the earth's surface in five days is of immense importance. The ability to service distant bases quickly with critical replacements parts and supplies in considerable quantity has been considered carefully by the Navy Air Transport Service.

"The significance of such an operation lies in the frequency of trips, as opposed to the total payload of a single airplane. Because the Mars can complete in hours, or at most days, a transport mission which would require weeks by surface vessels, the greater number of trips by the airplane over a long period of time raises its total of delivery greatly. For example, no more than a score of such airplanes can carry in a month the same cargo as a Liberty ship over a 2,500-mile route, and the critical supplies would move rapidly and be received when and where needed."

Most Efficient In World

Calling the Mars "the most efficient airplane in the world, per pound of weight per horsepower and per gallon of fuel consumed," Mr. Martin pointed out that on a basis of weight carried and miles covered, she consumed less gasoline than would have been required by a ten-ton truck during her recent endurance test.

"Not only is the Mars the most efficient airplane in the world," Mr. Martin added, "but she has also proved herself one of the safest. In demonstrating her ability to maintain and actually gain altitude on only two engines, the Mars has practically eliminated engine failure as an aviation hazard, since a condition in which at least two of her engines would not be functioning is almost unthinkable particularly when one stops to think that the size and construction of the Mars' wings are such that engine repairs can be effected during flight."

Mr. Martin went on to predict that the Mars would be found "the best available type of airplane for commerce immediately after the war."

"A heavy international air traffic will start upon the arrival of peace," he said. "Present airline equipment, both domestic and transoceanic, is badly worn from over-use. Quick replacements will be needed. Available types must bear this load. As demand for cargo space increases, the industry will answer with larger types—of the 250,000-pound and 500,000-pound size. We already have such ships on our drawing boards.

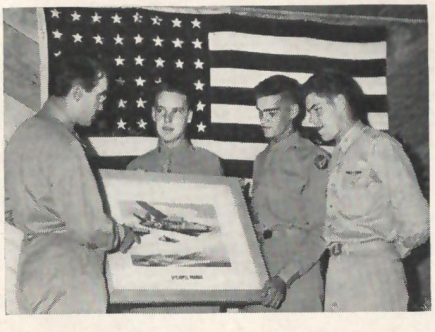
"There is no practical aerodynamic limit to the size of flying ships. Only the availability of payload will determine the ultimate sizes."

Bettered Records

As an interesting sidelight on the Mars endurance flight, Mr. Martin revealed that while she was not trying for records and had no N.A.A. observers aboard to make them official, the big flying boat actually bettered one international, three American and seven unofficial marks. The international standard was the closed circuit distance record for seaplanes, exceeded by approximately 50 per cent. American records surpassed included closed circuit distance marks for both seaplanes and land planes, and the national airline distance record for seaplanes.

On the unofficial side, the Mars set new standards for gross load at take-off —she left the water at 141,000 pounds; for size of crew on an endurance flight —there were 22 men aboard, or one more than the number of passengers carried by a standard DC-3 airliner; for amount of fuel carried by an airplane—she had approximately a tank car load aboard at take-off; and for longest sustained flight over water. In addition she established what are believed to be new non-refueling endurance marks for seaplanes, four-engined airplanes and airplanes of over 30,000 pounds gross weight.

And then, of course, the Mars, herself, is somewhat of a record. She is the largest successful heavier-than-air craft in the world. She has a wing spread of 200 feet from tip to tip, and her 117-foot, two deck hull has the cubic capacity of a 14 or 15 room house. She is powered with four Wright Cyclone 18 engines delivering more than 2,000 horsepower each. She has sleeping accomodations for sixteen, and a fully equipped galley which kept her 22 passengers supplied with steaks during the endurance flight. Her flight deck is so large that her captain can pace it just like a steamer's bridge. And operating over normal distances she can carry in excess of 15 tons of cargo, more than is carried by a regular freight car.



Three Chicago pilots in training at Dodge City (Kans.) Army Air Field receive Roswell Brown's painting of a formation of B-26 Marauders in flight from Major John D. Todd, commandant of student detachment. The painting was reproduced on the back cover of the March Star. Artist Brown donated the painting to hang in the Officers' Club as an inspiration to present and future classes of fliers who train to become pilots of the world's fastest medium bomber.

THIS MONTH'S COVER

The PBM-3 nicknamed "Nickel Boat" has had quite an adventurous career with the United States Navy, as told in the story beginning on Page 6. When returned to the factory recently, Photographer Charles Cignatta had a Roman holiday taking pictures of the ship from every conceivable angle.

It was more than taking pictures, though, as Charlie was using a new film, Anscocolor, with which he had been experimenting. That his experiments were successful is evidenced by the cover shot. Others you'll undoubtedly see from time to time in various publications.

Incidentally, we forgot to credit Charlie with the swell color shot on the October issue of THE STAR. Our public apologies along with belated recognition.

The picture of the Mars on the back cover was made recently during one of her trial flights. Both Charlie and Fred Parker were in an accompanying PBM-3 Mariner camera ship, but which one got this particular shot or the ones illustrating the Mars story on Page 4, we know not.

★ ★ ★

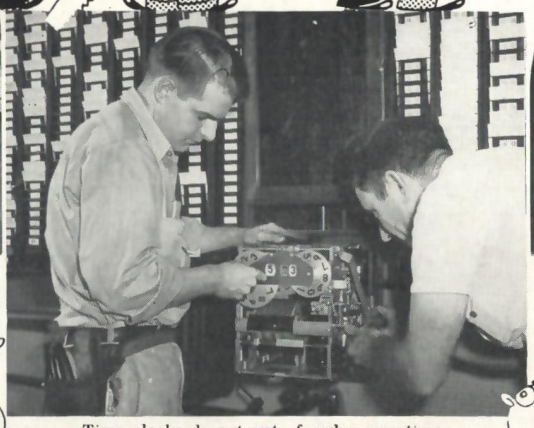
He Can Have 'Em

H. Charles Robertson, Procurement change control director, has a hobby that few, if any other, Martineers have. Mr. Robertson has for years been one of Maryland's leading authorities on snakes.

For eighteen years Mr. Robertson explored the hinterlands of the State and his findings were published jointly with the late Dr. Howard A. Kelly, eminent surgeon, in 1936, in a book entitled "Snakes of Maryland." In it he disclosed that there are 28 distinct types of snakes in Maryland.

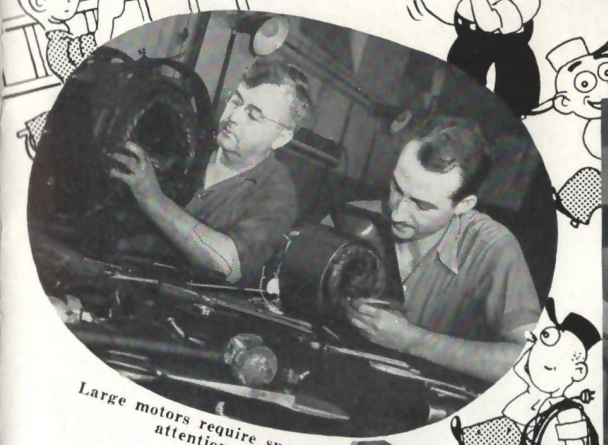
FROM CELLAR TO ROOF IT'S MAINTENANCE THAT KEEPS US GOING!

The tinsmith plies an ancient trade

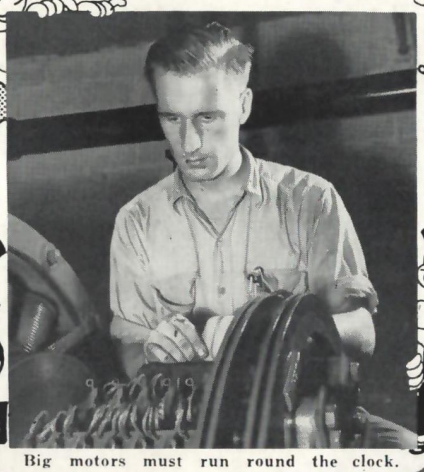


Time clocks do get out of order sometimes.

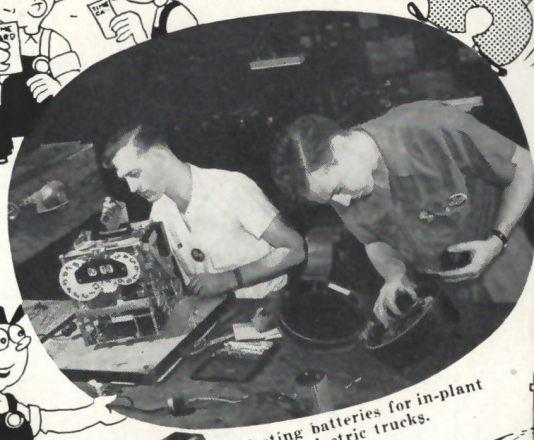
Estella Diltz gives a repair order to Martin H. Duffy.



Large motors require special attention.



Big motors must run round the clock.



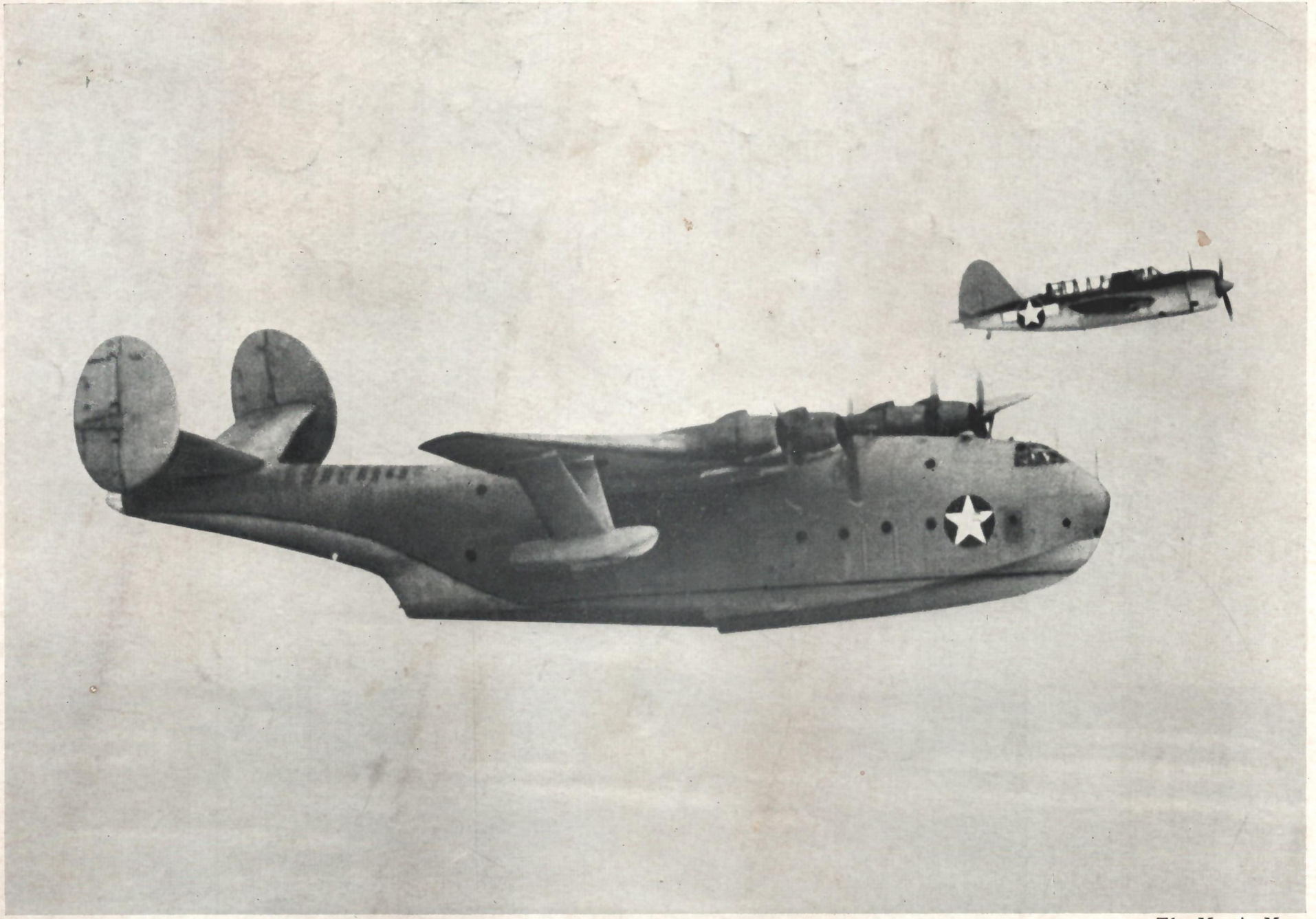
Testing batteries for in-plant electric trucks.

Repairing electric hand tools.

Edward Price's job is to keep plumbing in order.

Margaret Herman keeps typewriters in order.

Wood-block flooring needs replacing now and then.



The Martin Mars